

Information Disclosure Statement (IDS)	Application No.:	
	Appl'n Filing Date:	April 13, 2004
	Examiner:	
	Art Unit:	
	Attorney Docket:	2003-0234
	First Inventor:	S. MUTHUKRISHNAN <i>et al.</i>
	Title of Invention:	SPACE- AND TIME-EFFICIENT MANAGEMENT AND SUMMARIZATION OF DATA USING INTERMEDIATE SUMMARY STRUCTURE AND HIERARCHICAL MULTIDIMENSIONAL HISTOGRAM

Mail Stop Patent Application
 Commissioner for Patents
 P.O. Box 1450
 Alexandria, VA 22313-1450

Sir:

Applicants draw the examiner's attention to the documents listed on the Form PTO-1449:

- The Abdel-Mottaleb *et al.*, Ratnakar, and Graffagnino references show various uses of Haar or other wavelet transformations.
- Muthukrishnan *et al.* (naming an inventor common with the captioned patent application) disclose a method for dividing multi-dimensional data sets into rectangular partitions.
- The Thaper *et al.* article describes dynamic multi-dimensional histograms involving a dynamic summary structure that maintains an approximation to original data.

A copy of only the Thaper *et al.* reference is provided, because copies of U.S. patents and published U.S. patent applications need not be filed. 1276 OG 55 (August 5, 2003).

Applicants request that the examiner initial the space adjacent each document on the accompanying Form PTO-1449 to indicate official consideration of the documents, and mail the initialed Form PTO-1449 to the correspondence address of record.

Respectfully submitted,

Date: April 13, 2004

For Customer No. 26,652
 Telephone: 301.464.0431

By: Raymond C. Glenny
 Raymond C. Glenny
 Registration No. 32,413

Form PTO-1449

Information Disclosure Citation

Attorney Docket 2003-0234	Application No.
Applicant Shanmugavelayutham MUTHUKRISHNAN <i>et al.</i>	Examiner
Application Filing Date April 13, 2004	Group Art Unit

U.S. Patent Documents

Examiner Initials	Cite	Patent Number	Date	Name	Class	Sub-Class	Filing Date
	A	6,226,636	5/2001	Abdel-Mottaleb <i>et al.</i>			
	B	6,272,498	8/2001	Muthukrishnan <i>et al.</i>			
	C	6,574,372	6/2003	Ratnakar			
	D	2003/0123739	7/2003	Graffagnino			
	E						
	F						
	G						
	H						
	I						
	J						
	K						

Foreign Patent Documents

Examiner Initials	Cite	Document Number	Date	Country	Name	Class	Sub-Class	Translation
	L							Yes No
	M							Yes No
	N							Yes No
	O							Yes No
	P							Yes No

Other Documents (Including Author, Title, Date, Pertinent Pages, etc.)

Q	Thaper, Nitin; Guha, Sudipto; Indyk, Piotr; and Koudas, Nick, "Dynamic Multidimensional Histograms," <i>ACM SIGMOD 2002</i> , Madison, Wisconsin, USA (June 4-6, 2002).
R	
S	

Examiner Signature

Date Considered

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.